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ABSTRACT

The Open University offers part-time courses for adults by means of a multimedia distance teaching system. By adopting an open admissions policy and offering undergraduate courses, it is aiming for excellence and equality on a cost-effective basis. The university does appear to have achieved a high academic standard, both in its courses and its pass rates. It is also very cheap when compared with conventional universities. However, despite some progress since 1971, the Open University is still far from being completely open. People with little education and those in manual occupations are still heavily underrepresented among the students. There are signs that the university in its present form may not be the best method for many of these people. The new media do work but great care will have to be taken in deciding where and how to use them. (Author)

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EXCELLENCE, EQUALITY AND THE OPEN UNIVERSITY

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TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

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INDEX

		Page
1.	Introduction	1
2.	Equality of access (or How "open" is the Open University?)	2
2.1	Women	2
2.2	A low terminal age of education	3
2.3	The "working class"	5
2.4	Awareness of the Open University	6
2.5	Trends in the student population	7
2.6	Level of knowledge	8
2.7	Stated reasons for not applying	9
2.8	The non-acceptance of places offered	12
2.9	Conclusions on "openness"	16
3.	The cost of the Open University	18
4.	The achievement of excellence	19
4.1	The teaching methods	19
4.2	The courses	21
4.3	The success and failure of O.U. students	22
5.	Conclusion	25
	Footnotes	28
	Appendix	30

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TITLE **EXCELLENCE, EQUALITY AND THE OPEN UNIVERSITY**

AUTHORS **Naomi E. McIntosh and Alan Woodley**

Naomi McIntosh is Pro-Vice Chancellor (Student Affairs) and Head of the Open University's Survey Research Department

Alan Woodley is a Research Officer in the Survey Research Department

ABSTRACT

The Open University offers part-time courses for adults by means of a multi-media distance teaching system. By adopting an open admissions policy and offering undergraduate courses, it is aiming for excellence and equality, on a cost-effective basis. The paper examines to what extent these goals have been achieved.

The O.U. does appear to have achieved a high academic standard, both in terms of its courses and its pass rates. The O.U. is also very cheap when compared with conventional universities. However, despite some progress since 1971, the O.U. is still far from being completely "open". People with little education and those in manual occupations are still heavily under-represented among O.U. students. There are also signs that the O.U. in its present form may not be the best method for many of these people.

The new media do work but great care will have to be taken in deciding where and how to use them.

Introduction

Given limited resources for education, should we be pursuing excellence or equality of access and provision? Undoubtedly the pursuit of either goal at the expense of the other would create problems as well as benefits for society. However, the Open University represents a new attempt to solve this dilemma, at least in the field of adult higher education, by effectively claiming that no such dilemma exists. We can have excellence and equality.

Those who advocate an emphasis on "excellence" generally base their case on one or more of the following arguments.

(i) The educational argument

Relatively few people are capable of achieving excellence.

(ii) The economic argument

We have not got the resources to educate more people at the higher levels. If resources are diverted to the lower levels this will produce an intellectual decline.

(iii) The ideological argument

Society has only a limited need for highly educated people. Great dissatisfaction will be caused if people cannot gain employment commensurate with their qualifications.

The philosophy of the Open University is in complete antithesis to this. It is based on these arguments.

(i) There are many thousands of people, often early casualties of our elitist educational system, who are fully capable of degree-level education.

(ii) By using a multi-media distance teaching system, such people can be educated to degree level in an extremely cost-effective manner.

(iii) Everyone is entitled to access to as much education as he or she desires.

Such beliefs are fine in theory but how do they work out in practice? The Open University is now in its fifth year of operation and so we can begin to judge it by its results rather than its intentions. In this paper we examine the extent to which the O.U. has achieved the three aims of equality of access, excellence and cost-effectiveness.

2. Equality of access (or How "open" is the Open University?)

In a formal sense the O.U. is completely "open". No educational qualifications are required for entry and places are offered on a "first come, first served" basis. However, it is not open in any real sense to a person who does not know the O.U. exists, or who thinks "A" levels are required. Nor is it truly open if the person has the facts but considers the courses uninteresting, too difficult, too expensive or undesirable for some other reason.

For many people, true openness would be achieved if the O.U. student population mirrored the U.K. adult population with regard to certain key characteristics such as sex, occupation, terminal age of education, etc. (Others would go further and say that certain social groups should be over-represented at the O.U. to compensate for their traditional under-representation in conventional institutions of higher education). This notion, referred to by Trow as "equality of representation",[1] implies that, if a group forms x% of the adult population, then it should also form x% of all those who have heard of the O.U., x% of applicants and x% of provisionally registered students. We begin our analysis by looking at the relevant figures in the O.U.'s early years for three important groups: women, those with little education and "the working class".

2.1 Women

Equality of representation was not achieved in the case of women.

In 1971 women formed 52% of the U.K. population, but only 43% of those who had heard of the O.U., and 33% of those who became students (Figure 1). However, once they had applied, their rate of progress to finally registering as students was the same as that for men.

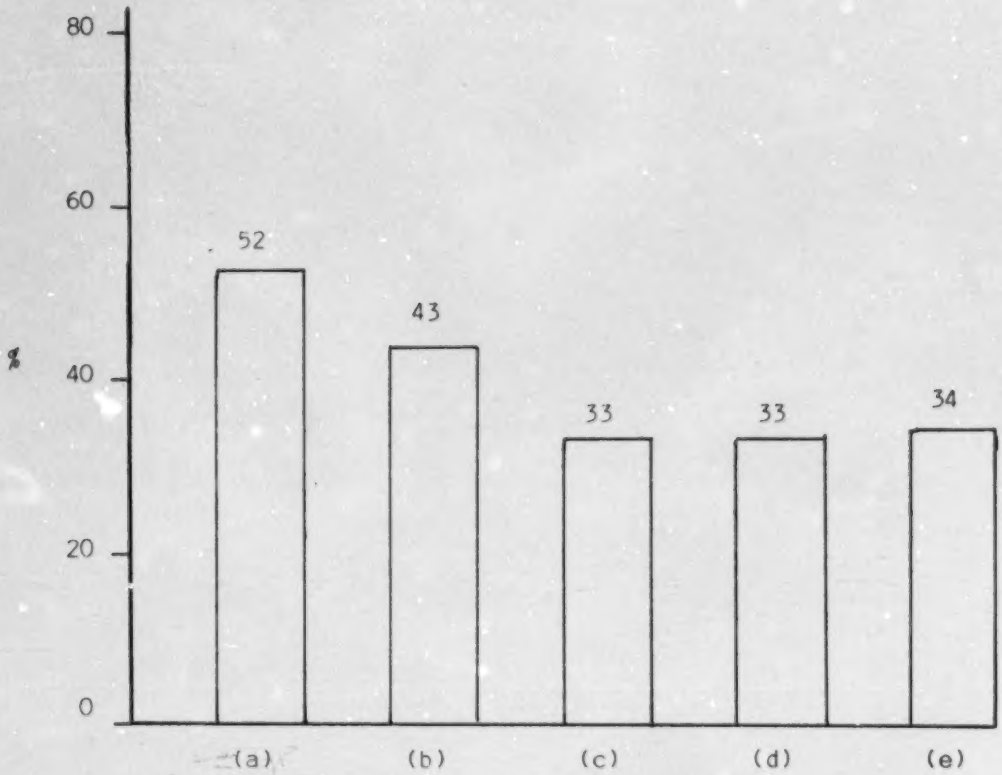

Figure 1. Women

a) % of U.K. adult population, 1971 (Source: Registrar General's Report, 1971).

b) % of all who have heard of the O.U., 1971 (Source: National survey conducted by Louis Harris Research)

c) % of all O.U. applicants for 1972 courses

d) % of provisionally registered students for 1972 courses.

e) % of finally registered students for 1972 courses.

2.2 A low terminal age of education

However, the inequality was much greater for those with a terminal age of education of 15 or under. People in this group formed 75% of

the population, but only 54% of those who had heard of the OU and a mere 14% of provisionally registered students. (Figure 2).

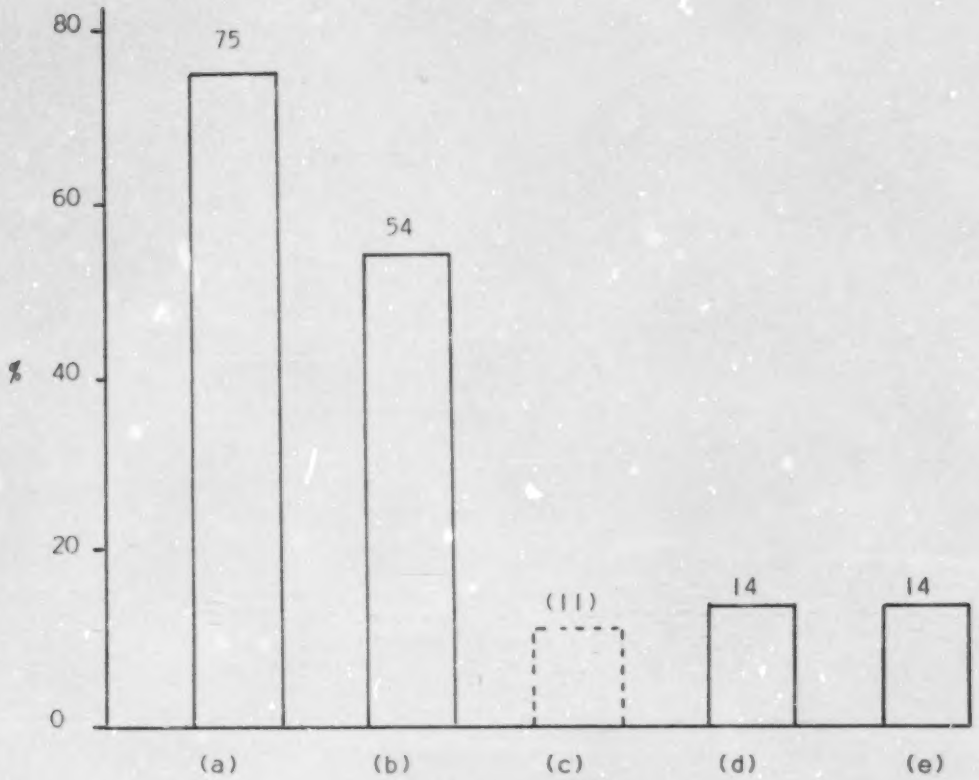

Figure 2. Terminal age of education of 15 or under

a) % of U.K. adult population, 1972 (Approximate figure obtained from 1961 Census data)

b) % of all who have heard of the O.U. 1972. (Source: National Survey conducted by Louis Harris Research)

c) % of all applicants for 1974 courses - data not available for 1973 courses.

d) % of provisionally registered students for 1973 courses.

e) % of finally registered students for 1973 courses.

2.3 The "working class"

To get a "fix" on the working class group we also consider men in manual occupations, (women have been excluded as the Registrar General's categories which are used by the O.U. are too coarse to distinguish the large numbers of women who are in non-manual, but nevertheless "working class" jobs). The pattern is very similar to that of those with a low terminal age of education. Men in manual occupations formed 61% of all male workers, 35% of those who had heard of the O.U. and 9% of registered students.

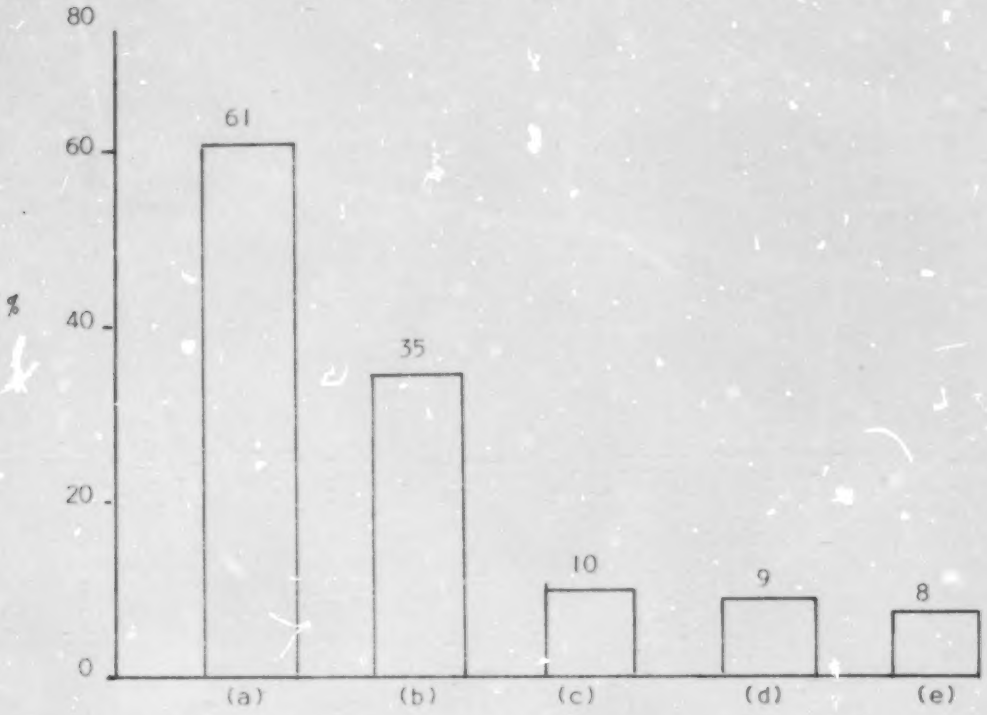

Figure 3. Men in manual occupations

a) % of economically active males in manual occupations in the U.K. 1971. (Source: 1971 Census)

b) % of all who have heard of the O.U. (1971) who were in I.P.A.[2] social classes C2, D, & E. (Source: National survey conducted by Louis Harris Research).

c) % of working male applicants for 1972 courses.

d) % of working male provisionally registered students for 1972 courses.

e) % of working male finally registered students for 1972 courses.

The O.U. had clearly not achieved true openness "at a stroke" and probably only the most naive idealist had expected it to. Before we go on to examine what progress has been made towards this goal in subsequent years, however, it is worth looking a little more closely at the apparently middle-class nature of the student population. In fact O.U. students only appear as being predominantly middle-class when the students' own present occupations are used to derive their social class. If we take their father's occupation at the time the students left school, as is done by the U.C.C.A. for undergraduates entering conventional universities, then a very different picture emerges.

In 1971, 29% of the students entering conventional universities had fathers in manual occupations whereas the corresponding figure for O.U. students was 52%. Even allowing for the decline in manual occupations between 1951, the modal school leaving year for O.U. students, and 1971, the O.U. still shows a marked improvement over conventional universities.[3] Preliminary figures for the 1975 intake of O.U. students suggest that, once more, 52% have fathers in manual occupations. If we take into account the fact that these students left school more recently, when the numbers in manual occupations had fallen even further, then this identical figure may even indicate a relative increase in the proportion of O.U. students coming from working-class homes.

The O.U. contains a lot of students who have been upwardly mobile. It is clear that teaching has provided the main route for this mobility and also that many went into teaching late, having started work in a different field. This upward mobility has undoubtedly been assisted by the increased opportunities at the secondary and further education level. Around 60% of the 1971 intake had attended a grammar school, for instance, and over 80% had undertaken some form of part-time education since leaving school.[4] Perhaps it was to be expected that many of those from working-class homes who were willing to face the rigours of O.U. study would be those who had already aspired to non-manual jobs, mainly through the acquisition of educational qualifications.

2.4 Awareness of the Open University

Differential levels of awareness amongst various social groups are obviously an important factor affecting accessibility. Awareness, i.e. the percentage who said they had heard of the O.U., has increased across the board since 1971 but differentials, although decreasing in size, clearly still exist. Between 1971 and 1974 the overall level increased from 31% of the population to 54% (Table 1). The comparable figures for those in IPA social classes AB were 66% and 82% whereas for those in classes DE they were 17% and 37% respectively. As it is likely that awareness among the upper classes has effectively reached saturation point, such differentials should continue to diminish in future years.

Table 1

Level of awareness 1971 - 1974

% knowing of the O.U.		1971	1972	1973	1974
	Total	31	40	44	54
Social Class	AB	66	78	78	82
	C1	50	58	61	71
	C2	21	30	38	49
	DE	17	22	26	37
Sex	Men	37	43	47	58
	Women	26	37	42	51
Terminal age of education	15 and under	(No data)	29	34	41
	16 and over	(No data)	74	73	75

2.5 Trends in the student population

Given that awareness of the O.U. has grown, what effect has this had on the profile of O.U. students? Table 2 gives the figures for each new intake of provisionally registered students from 1971 to 1975. We again take the case of women and we also look at those who did not possess the minimum university entrance requirements of 2 "A" levels. As well as taking male manual workers, we also give the proportion of female workers in "clerical and office" and "sales and service" occupations as the nearest equivalent to female working class occupations.

In 1975 women constituted 42% of the new intake as opposed to 26% in 1971. There was a similar increase, from 29% to 43% for those not possessing formal university entrance qualifications. Taking all male students in work, manual workers formed 9% of the new intake in 1972 and 14% in 1975. The proportion of female workers in "clerical and office" and "sales and service" occupations, rose from 21% to 30% over the same period.

Table 2. Provisionally registered students

		Year of entry				
		1971	1972	1973	1974	1975
Base = All provisionally registered students		24,220	20,501	16,895	14,976	19,823
		%	%	%	%	%
Sex	Male	74.2	67.2	65.5	62.2	57.7
	Female	25.8	32.8	34.5	37.8	42.3
		%	%	%	%	%
Level of highest educational qualification	None	6.8	8.6	9.1	8.5	11.2
	CSE/RSA	1.8	3.8	3.8	2.9	3.6
	1-4 'O' levels	5.9	7.6	8.1	8.0	10.2
	5 or more 'O' levels	10.8	12.8	12.3	10.8	12.9
	1 'A' level	3.5	4.2	4.1	4.3	4.7
	Total	28.8	37.0	37.4	34.5	42.6
Base = all male provisionally registered students in work			13,387	10,805	8,993	10,970
		%	%	%	%	%
Occupation	Manual workers	No data	8.7	9.8	9.8	13.6
Base = all female provisionally registered students in work			4,095	3,526	3,488	5,297
		%	%	%	%	%
	Clerical and office/ Sales and service	No data	21.4	23.4	24.5	30.3

Once more progress has been made. However, members of certain social groups are still less likely to become O.U. students given that they have heard of its existence. In trying to explain these differences we can draw on the results from a number of surveys.

2.6 Level of knowledge

One reason why people may not apply even though they have heard of the O.U. is that they may not have accurate knowledge of what the O.U. is and what it offers. Although no clear-cut differences have been found for men and women, Table 3 shows how those with a low terminal

age of education and the working classes are much more likely to have incorrect knowledge about the O.U. In the study all those who had heard of the O.U. were asked to say which of the statements shown applied to the O.U. The figures indicate the percentage who thought the statement did apply.

Table 3. Statements thought to apply to the O.U. (January 1974)

Base = all respondents aware of the O.U.	Social class		Terminal age of education	
	AB/C1	C2/DE	15 or under	19 or over
	%	%	%	%
No formal entry qualifications needed (Correct)	44	37	35	58
Uses radio & television (correct)	85	74	73	91
Uses correspondence teaching (correct)	65	51	50	73
Have to attend full-time (incorrect)	8	11	13	7
Does not cost anything to study (incorrect)	18	22	24	15

The figures for 1974 above are in fact very little better than those for 1971. The overall level of knowledge has only risen slightly and the differentials have remained much the same.

2.7 Stated reasons for not applying

Upon enquiring to the O.U. a person is sent a Guide for Applicants. Approximately one third of these people complete and return the application form which is contained in the Guide. A reply paid card was included in a proportion of the 1973 and 1974 Guides, which people were asked to complete and return if they decided not to apply to the O.U. that year. We now have some preliminary data on this group of "non-appliers".

First of all, who are these people who come very close to applying to the O.U. but finally decide not to? As one might expect, women are over-represented in this group when compared with those who actually apply, as are those with a terminal age of education of 15 or under. In occupational terms, manual workers and housewives are over-represented while teachers and technical personnel are under-represented (Table 4).

Table 4. "Non-appliers" vs Applicants for 1975 courses

		Non-appliers		Applicants
Base = all respondents to questionnaire = 100%		6,439	Base = all applicants = 100%	50,754
		%		%
Sex	Men	49		58
	Women	51		42
Terminal age of education	15 or under	23		17
	21 or over	20		30
Selected occupational groups	Housewives	21		14
	Manual workers	11		9
	Education	11		24
	Technical personnel	6		10

Secondly, what reasons do they give for deciding not to apply? In considering their replies we have taken two factors into consideration a) the frequency with which each reason was given and b) whether or not the reason was accompanied by plans to apply to the O.U. in the future. The reasons given are shown in Figure 4.

Those factors in the top right hand corner of the matrix which are mentioned by a lot of people, relatively few of whom plan to apply in the future, are obviously of major importance. Those factors in the top left hand corner are often mentioned but do not appear to be permanent barriers. Factors in the bottom right hand corner are mentioned less often but are more serious. Finally, the factors in the bottom left hand corner are not often mentioned nor do they seem to cause lasting problems.

Figure 4. Reasons for not applying to the O.U.

Frequency of response	Likelihood of applying to the O.U. in the future: High	Likelihood of applying to the O.U. in the future: Low
High	Care of children Not enough time available for studying Other domestic demands Changed jobs Doing other part-time course Doing preparatory course Sent for Guide out of general interest Not enough details in the Guide Type of job makes O.U. study difficult	Not able to attend summer school Financial commitment too great No courses in subjects of interest Inability to specialise Too long to get a degree
Low	No BBC2 television available No VHF radio available Doing other full-time course Likely to be abroad in 1975 Teacher in probationary year	Non-recognition of degree Prefer face-to-face tuition Courses too difficult Would not help job prospects No study centre accessible Care of other dependents Sent for Guide out of professional interest Health difficulties Sent for Guide for reference purposes

In Table 5 we turn to the reasons given by groups of special interest. The figures indicate the percentage within each group who mentioned a given reason.

Table 5. Reasons for not applying, by occupation and terminal age of education (percentages)

	Occupation			Terminal age of education	
	House-wives	Educ-ation	Manual workers	15 & under	21 & over
No courses in subjects of interest	15	15	22	18	19
Inability to specialise	11	14	12	11	15
Possible non-recognition of degree	3	5	8	4	7
Unable to attend Summer School	46	12	31	39	17
Financial commitment too great	36	14	25	31	16
Courses too difficult	9	1	10	14	1
Type of job makes O.U. study difficult	2	5	26	16	7
Would not help job prospects	3	3	8	7	6
Care of children	52	9	4	15	13
Not enough time available for studying	28	31	30	29	29

Clearly housewives have three major problems; cost, summer school attendance and the care of their children. Compared with teachers, manual workers were much more likely to mention cost, summer school attendance, difficulty of the courses and difficulties associated with their type of work. A very similar pattern emerges when we compare those with high and low terminal ages of education.

2.8 The non-acceptance of places offered

Each year about a quarter of the places offered to applicants are turned down. Proportionately more places are offered than are actually available to counteract this. As there can be a period of anything up to nine months between applying and being offered a place, one would expect a certain degree of non-acceptance due purely to changes in circumstances such as emigration, illness, death etc.

However, the rate of non-acceptance suggested that at this stage too there were barriers to openness. A study was therefore mounted of all those who turned down the offer of a place for 1974 courses. Certain basic information is now available. The rate of non-acceptance was the same for men and women. However, when we look at the rates of non-acceptance by occupation and sex, significant differences emerge (Table 6). For men and women those in manual, clerical and office, and sales and service work, and those not working were much more likely to turn down the offer of a place. Exact data is not available for terminal age of education, but in Table 7 we compare the terminal age of education of those who responded to the non-acceptance questionnaire with that of provisionally registered students. These figures suggest that those with a low terminal age of education were much less likely to accept the offer of a place.

Table 6. Proportion of applicants in each occupational group who did not accept the place offered

	Men	Women
	%	%
Housewives	*	28
Armed forces	27	*
Administrators and managers	29	23
Education	19	21
Professions and Arts	26	29
Qualified scientists & engineers	24	21
Technical personnel	28	25
Manual workers	37	33
Clerical and office	32	29
Sales and service	34	37
Not working - retired, students etc.	40	35
Total	27	26

* Not applicable/numbers too low

Table 7. Terminal age of education - non-accepters compared with provisionally registered students

Terminal age of education	Respondents to non-acceptance questionnaire %	Provisionally registered students 1974 %
15 or under	15	10
16	20	13
17	13	9
18	12	8
19	5	5
20	5	5
21 or over	29	48
No information	1	1

We are still in the early stages of analysing the reasons for non-acceptance and therefore we can only present summary data. All reasons have been "double-coded" to distinguish between the "trigger" element of a reason and the "consequence". Trigger elements include "promotion at work", "pregnancy", "advice from an O.U. counsellor" etc. and the consequences can be "not enough time", "can't afford it", "courses too difficult" etc. In Table 8 we present the overall figures for both elements.

Table 8. Reasons for non-acceptance

"Trigger" reasons	%
Changes in work circumstances	28
Changes in personal/domestic circumstances	21
Changes in financial circumstances	3
Offered a place on a course elsewhere	8
Decided to apply elsewhere	2
Number of credit exemptions awarded	3
Not offered 1st. choice course(s)	3
Offer received too late to meet payment date	2
Advice from O.U. counsellor	2
Knowledge gained from O.U. students	1
Knowledge gained from O.U. literature	1
Knowledge gained from other source	1
Experience on another course	1
Other	6
No "trigger" - decided after all that	11
Unspecified or a combination of "triggers"	7

"Consequences"	%
Not enough time for study	24
Will be doing some other course	13
Can't afford to study with O.U.	10
Can only manage one foundation course	5
Chosen wrong O.U. course(s)	4
Will be out of the U.K.	4
Unfair to the family	4
Courses too difficult	2
Did not want to do course offered	3
Offer too late to meet payment date	2
Impossible to attend Summer School	2
O.U. degree of no value	2
Not physically/mentally up to it	2
Other	14
Unspecified or combination	5

Work is now proceeding to identify the most typical combinations of the two elements. We know for instance that the combination "Increase in working hours/not enough time for O.U. study" accounts for 10% of all respondents.

Some 15% turned down the offer of a place because they were going to take some other course, either through choice or because their work demanded it. Table 9 indicates the types of courses.

Table 9. Alternative courses being studied by non-accepters

	No. going on to other course = 427 %
A higher degree	9
A first degree	23
Teacher training	13
ONC/D, HNC/D, C & G.	8
Professional qualifications	24
O & A level for full-time entry	6
Preparatory courses for O.U.	3
Other	14

2.9 Conclusions on "openness"

Although progress has been made, the O.U. is still far from being truly open. At every stage from actually hearing of the O.U. to accepting the offer of a place, barriers exist which discriminate against particular types of people, many of whom have been deprived of educational opportunities in the past.

The graphs in the first part of this paper clearly show that the main problem lies in the pre-application period. An important task before the O.U. is to ensure that more people from the educationally deprived groups know about the opportunities which it offers. Up to now the O.U. has had little money to spend on publicity and has relied to a large extent on free publicity through articles in the quality press, on O.U. students "spreading the word", and on the broadcasts being picked up by non-students. None of these is likely to be an effective means for reaching the educationally deprived groups and more positive steps must be taken.

Awareness and accurate knowledge of the O.U., whilst being essential, are not sufficient to attract applicants from such groups. Before they will apply, such people will have to feel that O.U. courses are interesting, worthwhile and, above all, within their capabilities. It would be irresponsible of us to persuade them to apply unless we were convinced that this was the case. In a later part of this paper we examine the performance of the people from those groups whom we have attracted so far.

Irrespective of the academic level of its courses, certain features of the Open University's teaching system will continue to disadvantage prospective applicants from the educationally deprived groups. A few are listed below:

a) Students taking each foundation course must attend a one week summer school. For manual workers this will generally mean that they have to sacrifice one of their two or three weeks annual holiday. Attendance is also especially difficult for women with young children.

b) To obtain an ordinary degree six credits are needed, but students are awarded up to three credit exemptions depending upon how much higher education they have already received. The majority of manual workers, and all of those without experience of higher education, receive no credit exemptions. As most of these can only cope with studying for one credit each year this means that it will take them at least six years to obtain a degree, whereas many others may graduate in two or three years.

c) Local authorities generally only pay the student's summer school fees. The expense of course tuition fees, set books, travelling to study centres etc., must be met by the student. This is more of a problem for those in manual and routine non-manual occupations where earnings may be less and their employers are less likely to sponsor them or to give them paid leave. Many people who may well be studying out of interest, rather than to further their career prospects, feel guilty about using the family income for a "selfish indulgence". This is especially true for housewives who are currently without an income of their own. The increase in fees in 1976 is likely to exacerbate this problem.

d) For a good home-study environment the student requires a BBC2 television receiver, a VHF radio receiver and a quiet place to study. Those with low incomes are less likely to have, or to be able to afford, the necessary receivers and they are also less likely to have a room which they can set aside for their studies.

e) For those with a limited education, correspondence study with its reliance on a high degree of literacy, is probably the most arduous and least accessible method for making up the deficiency.

f) O.U. courses, being largely non-vocational, offer little short-term prospects of advancement compared with other, more vocational, courses.

3. The cost of the Open University

Teaching degree students by O.U. methods is cheaper than at conventional universities. As Carter said on the subject "It would be extraordinary if it were otherwise." [5] Exactly how much cheaper is a complex question even for economists. As neither of the present authors are economists we refer interested parties to two papers on the subject and outline the main finaings below.

Wagner calculated a number of comparative cost figures for the O.U. and conventional universities and the table summarising his results is given below. [6] (At all times he assumed that two O.U. undergraduates were the equivalent of one full-time undergraduate).

Table 10. Cost of the Open University and Conventional Universities

	Calculation	Open University	Conventional Universities
A.	Average recurrent cost per equivalent undergraduate	£251	£940
B.	Capital cost per student place	£165	£3,000
C.	Average recurrent cost per graduate	£4,000 at 85 percent drop-out rate	£4,000+
D.	Resource cost per equivalent under-graduate	£268	£1,577

Source: Higher Education Vol. I. No.2 May, 1972.

The "Average recurrent cost per graduate" for the O.U. represents a break-even point rather than a cost, i.e. the O.U. would be cheaper than a conventional university even if it had a drop-out rate of up to 85%. In "D. Resource cost per equivalent undergraduate" he takes into account the cost of output foregone through conventional students not being in productive employment.

Laidlaw and Layard concerned themselves with each individual OU course. [7] They found that the variable cost per student-course was with one exception lower in the OU than elsewhere. For them this constituted a strong case for the use of existing OU packages in campus universities and for the expansion of existing courses at the O.U.

These encouraging verdicts need to be qualified in the light of certain developments. Two factors in particular may make the O.U. less cost-effective in future years than it was in its early days Firstly, the through-put of students is declining, i.e. students are now taking fewer credits per head per year. Less students are willing or able to fit in the 20 plus hours of study necessary for two courses with their normal working life. As the O.U. attracts more students with no experience of higher education and with physically demanding jobs, this trend is likely to continue. Therefore, in this one respect at least, greater openness can lead to a decline in cost-effectiveness.

The second factor concerns individual courses. In moving towards its 1984 goal of 137 courses (equivalent to 87 full credits) the O.U. is now producing more higher level courses, many of which will inevitably have fewer students taking them in a given year. It is estimated that in 1977 there will be 39 O.U. courses running with less than 400 students on each. Therefore, by providing a wider variety of courses the O.U. will be enabling its students to have a wider choice but it will be reducing its own cost-effectiveness. Despite this, although many individual courses will not be cost-effective when judged by Laidlaw and Layard's methods, the overall degree will clearly remain so and this is the most significant fact. It is worth noting also the additional unquantified financial benefit which arises from the increasing use of OU materials by other institutions.

4. The achievement of excellence

How does an OU education compare with that of a conventional university? In this section we examine how the OU teaches, what it teaches, and how the students fare, in an attempt to judge the OU in academic terms.

4.1 The teaching methods

The O.U. teaches at a distance and the courses which it provides utilise a variety of teaching media. It is in the business of the provision of mass higher education, and it is using the mass-media to aid it in its task. The use of innovatory forms in education, in particular the media, is often associated with radical attempts to increase access. The recipients of these attempts are often educationally disadvantaged, but are caused to learn in new untried and often difficult ways. But the use of the media is also often associated with the attempt to save money. The mass-media, of themselves, are not cheap - they are only cheap when used for large numbers. The O.U. is therefore only cheap because it uses the mass-media for large numbers. The use of the mass-media inevitably means at some levels, standardised content and a mass product. But the more students there are, the more difficult it is for standardised content to meet the individual differences and levels of need of all students. Conventional universities with a relatively homogeneous intake of students of similar ages and abilities could theoretically manage with a mass product better than the O.U.

The O.U. has been criticised for reducing the educational experience received by its students through the combined use of independent learning and highly structured materials. However, although its basis is independent learning, there are a variety of other contexts including tutorials, counselling sessions, self-help groups, summer schools etc., which can and do enrich the O.U. learning experience. The O.U. does not offer the intense experience of three years of campus life, but for

the majority of O.U. students such an experience would probably be inappropriate and inaccessible given their occupation and family commitments.

The criticism implies that there is a levelling down of experience. There is indeed likely to be a levelling, part of which relates to the need for academic certification, which has to be nationally recognised and acceptable. But this does not necessarily mean the levelling is downwards. In some ways clearly it has been a levelling up!

O.U. teaching methods have also been shown to have made some improvements over conventional methods. The courses themselves are designed by teams of academics, television and radio producers and educational technologists, specifically for independent learning and the materials only reach the students after much discussion and re-drafting. After a life of about five years each course is then re-made drawing on feedback which has been collected from students and staff. Television and radio are not just used to bring "chalk and talk" lectures to the student to make a change from the written word. These broadcasts can add new dimensions to the course, be it through computer animation in a Maths course, a film of an industrial chemical process or of the area which D.H. Lawrence wrote about in his novels, or merely a guest radio lecture by some eminent academic from another university.

To the extent that the argument about the reduction of the educational experience is valid, one must ask how much [illegible] inevitable. Independent learning is often confused with individualised learning. The O.U. has been set up for independent learning. Its content as we have noted cannot be easily individualised. What can be individualised is the pattern of students' study; how they choose to use the wide variety of learning components available to them; how long they spend over their studies; over what period of time; what pattern of subjects they choose to build up to a degree. It can in a real sense be individualised but only at a macro level.

Many who criticise the O.U. might contrast it with the individualised learning contract system developed by Empire State University or the University Without Walls. These institutions, although having similar objectives to the O.U., have adopted a very different strategy. The tutor negotiates a work programme with each individual student in a way not dissimilar to that used at Oxford or Cambridge! This flexibility gives an advantage to the educationally deprived adult, but the system is heavily labour intensive and therefore not cheap.

It is interesting to speculate as to whether or not "society" would have permitted the O.U. to exist, and extend educational opportunity on such a scale unless it was clear that it would also be doing it cost-effectively. Certainly nobody would have found the money to provide "bricks and mortar" places for more than 50,000 adult students. If the argument about the reduction of the educational experience is valid, then either one could suggest that the opportunities should be withdrawn because they are not good enough, or that to have something is better than to have nothing. But if the cost increases too much, and becomes

nearer to that of conventional universities, then in a time of scarce resource, the political will for this area of activity may not continue.

4.2 The courses

Many educational innovations have attempted to innovate in all things; access, content, methods and standards. Most of them have failed. The O.U., while being radical in access and methods, has not attempted to write everything anew. Birnbaum comments that "it has accepted intact the tradition of high culture and attempted to transmit it in the best possible way". [8] Quite a few of the courses are inter-faculty or inter-disciplinary in nature, but on the whole they do not represent a dramatic break with the conventional curriculum, nor a change in standards. There are good reasons for this, as Jennie Lee foresaw. Not only are the educationally disadvantaged the least able to cope with new methods, they are also the least able to afford low-grade or dubious credentials.

There have traditionally been two main alternative approaches to maintaining standards.

Either - if you select the elite first, you may safely assume that the majority will pass. Formal assessment within or at the end of the course is therefore less important and can be experimental,

Or - if you allow open admission, anyone may start to study and many will not finish, either through a high drop-out or a high fail rate.

Much of the current scepticism about educational innovation in America stems from their attempts to be innovatory in everything at the same time. Standards are perhaps the most dangerous thing to put at risk. Even Empire State and UWW have not gone as far as the O.U. with open admission. Graduation from high school is their normal entry qualification.

It has always been intended that the O.U. should offer general rather than specialist degrees. This was a realistic decision as many hundreds of courses would have had to be made if the majority of students were to be able to make up their own desired specialist degree. Even though there will be 137 different courses by 1984, the choice that this will offer is not considered wide enough by many academics and students.

It is difficult to measure how "good" O.U. courses are but we can look for pointers in certain areas. Firstly, several institutions of higher education are admitting former OU students on the basis of their O.U. credits. For example, this has happened at Sussex, Lancaster, Bristol, Warwick and Durham University and at Liverpool Polytechnic. In general two foundation course credits, or one foundation course plus a second level credit, are considered to meet the matriculation

requirements. Advance standing on the course is being granted where the student holds three O.U. credits in "appropriate" subjects.

Secondly, some institutions are beginning to use O.U. course materials for their own students. The actual amount varies from individual course units or readers to complete courses. For instance, they are using a whole third level Arts course at the University of Kent. A course in genetics, which is being made at the moment, represents a further development in that it is by an inter-university team and is being developed specifically for use both at the O.U. and at conventional universities.

Thirdly, the O.U. degree is increasingly being recognised by employers as a valid qualification. For example the Secretary of State for Education and Science has recognised the O.U. degree as equivalent to those of other approved institutions for the purpose of teachers' salaries in England and Wales. Persons holding an O.U. degree are eligible for the Police Graduate Entry Scheme. The D100 course exempts people from the "Society" paper of the Royal Town Planning Institute's first professional exam. Information is very fragmentary at this stage, consisting largely of precedents created by individual students. The attitudes of the various employers need to be systematically surveyed in the future, as do the experiences of O.U. graduates. However, it is still fairly early and groups such as the Council of Engineering Institutions appear to be waiting until more third and fourth level courses become available before making any firm decisions.

4.3 The success and failure of O.U. students

The nature of the O.U.'s credit system creates many problems for researchers when they try to examine success rates. However, this is dealt with in detail elsewhere and here we content ourselves with a few overall statistics.[9]

In the first year new students provisionally register for foundation courses for what amounts to a trial period. If they decide to continue they pay the final registration fee and at that point they become full O.U. students who can leave and rejoin the O.U. at will in future years. Each year, about 75% of the provisionally registered students decide to finally register. Finally registered new students generally succeed with their first year studies - in 1974 some 80% were awarded at least one credit at the end of the year. In subsequent years of study course success rates remain fairly high. In 1974 these stood at around 70% on average for all courses that year. The students themselves show great persistence and Table II shows the proportion of finally registered students in a given year still studying in subsequent years. Over half the students who finally registered in 1971 were still studying at the beginning of 1974. The following intakes show a similar staying power.

Table 11. The rate of continuation of O.U. students *

		Year of Intake		
		1971	1972	1973
Base = all finally registered students		19,581	15,716	12,680
		%	%	%
% registering in a given year	1971	100		
	1972	83	100	
	1973	68	79	100
	1974	54	67	81
	1975	41	53	69

In Table 12 we look at O.U. graduates. By the end of 1974, the O.U. had produced 9,559 graduates and a third of the first intake had already obtained degrees. However, the table also shows a decline in through-put with a smaller proportion of the 1972 intake graduating in two years.

Table 12. The rate of graduation of O.U. students *

		Year of Intake		
		1971	1972	1973
Base = all finally registered students		19,581	15,716	12,680
		%	%	%
% graduating (cumulative)	1972	4.6		
	1973	21.5	2.0	
	1974	34.5	16.3	1.9

In general then, the success rate of O.U. students seems fairly satisfactory. As far as one can make any comparisons, the figures are lower than for conventional universities in the U.K. but not very different from state universities with open admission in America. They are much higher than for other part-time correspondence courses.[10] However, if the O.U. is aiming for excellence and equality then we must direct our attention away from considerations of overall performance rates and towards the performance of those from the "lower" occupational groups and those with low educational qualifications.

* See Appendix for updated version of these tables

McIntosh and Morrison found, as one might have expected, that people in these groups in the O.U.'s first intake fared less well than other students.[11] This was particularly noticeable in their first year and the differences decreased in size in their second and third years of studies. In this paper we wish to examine the first year performance of these groups in the 1971 and 1974 intakes of new students to see whether the situation has improved or not.

Firstly, we compare the performance of manual workers with that of a group in "middle-class" occupations, namely "Education", "The Professions and Arts", "Qualified scientists and Engineers" and "Technical personnel". For each of four foundation courses (the Technology foundation course was not available in 1971) we consider a) the percentage of provisionally registered students who finally registered and b) the percentage of finally registered students who gained a credit. To produce a "discrimination index" we have subtracted the manual workers figure from that of the middle-class group. (E.g. If 60% of the middle-class group finally registered on a certain course, but only 40% of the manual workers, this would appear as the figure 20 in the following table).

The results are given in Table 13. They show that discrimination has risen for each course up to final registration and for Arts and Social Science up to the credit stage. For this second stage, Maths has remained constant and there has actually been a fall in the case of Science. In six cases out of eight, then, the gaps have widened and an examination of the raw percentages shows that an absolute decline in progress is involved as well as a relative one. In general the rate of progress of manual workers has shown a real decline whereas that of the "middle-class" group has shown a small increase.

Table 13. The difference in rates of progress between groups of "middle-class" and "working-class" O.U. students

	a) Provisional - Final Registration		b) Final Registration - Credit	
Foundation Course	1971	1974	1971	1974
A100 Humanities	3	20	19	30
D100 Understanding Society	7	13	11	20
M100 Maths	15	20	27	27
S100 Science	10	15	22	17

These results might have been expected to a certain extent. New students in 1974 were less likely to have high educational qualifications than in 1971 and one would expect this decline to be more apparent among manual workers than, say, teachers. To explore this in more detail we go on to examine differing rates of progress between 1971 and 1974 for those with "Low" (less than 5 'O' levels or their equivalent) and "High" (Teachers Certificate, University Degree or Diploma) educational qualifications.

The results shown in Table 14 where once again we use the discrimination index. In this case the amount of discrimination is greater in 1974 than in 1971 in all eight cases.

Table 14. Difference in rates of progress between O.U. students with "low" and "high" educational qualifications

	a) Provisional - Final Registration		b) Final Registration - Credit	
Foundation Course	1971	1974	1971	1974
A100 Humanities	2	17	9	20
D100 Understanding Society	3	12	12	23
M100 Maths	22	35	39	52
S100	8	17	24	25

These results suggest that although the O.U. is attracting relatively more students with manual occupations and lower educational qualifications, they are now doing relatively worse in their first year of O.U. studies. Their progress on future courses and the performance of subsequent intakes must obviously be carefully monitored to see whether this apparent trend is real. Significant numbers of such people do succeed at the O.U. but it is clearly more difficult for them to do so. There appears to be a danger that the O.U.'s open door will become a revolving door which rapidly deposits many disadvantaged students back on the pavement.[12].

5. CONCLUSION

We have tried to show that the O.U. has achieved a fairly high standard of excellence on a cost-effective basis and that it is also moving slowly towards greater equality. However, there are already signs that improvements in any one area can only be made at the expense of the other two:

a) Greater equality

The progress made by O.U. students from educationally deprived groups, suggests that, in the absence of additional support both from within and without the university, as more of them are encouraged to register there will be a decline in through-put and an increase in drop-out. Cost-effectiveness and excellence as measured by success rate, will decline. If more face-to-face tuition is provided or alternative versions of courses are offered this will increase the costs.

b) Greater cost-effectiveness

Costs themselves could be pushed down by cutting down on more expensive ingredients such as broadcasts or tutorial provision, but this would reduce the quality of the courses and probably increase the drop-out rate. Cost-effectiveness could be raised by only admitting those students with a high probability of succeeding, but this would be against the open admissions policy. Similarly, rules requiring a minimum course-load per year or a time limit for graduation would be unacceptable to the University.

c) Greater excellence

In offering more specialised courses, the O.U. will become less cost-effective as there will be fewer students per course. If it raised the standards of all its courses this would produce higher drop-out rates which would make the O.U. less open and less cost-effective.

Given the inter-related nature of the problem, the O.U. must obviously decide upon priorities. If, as many people believe, the O.U. should now be aiming for equality, them more money must go on publicity. However, unless a higher drop-out rate is merely to be tolerated, this must be accompanied by course revisions. Such revisions might include re-designed foundation courses with lower "entrance levels", the abolition of compulsory summer schools, the ability to spread one course over two or more years, specially designed preparatory courses, etc.

The O.U. is not likely to be the sole solution to the problem of under-educated adults. For many people, the proposed Open College offering C.S.E.'s, 'O' levels etc. would be more suitable as a starting point for further study or as an end in itself. However, the academic level of the courses is only part of the problem. The basic irony remains that we are expecting disadvantaged students to learn independently. Coming as they do from a variety of backgrounds and with a variety of needs, the "face-to-face dialectic" would benefit them most and could be most easily adapted to their needs. Conventional universities with a relatively homogeneous intake of students of similar ages and abilities, could theoretically manage with a mass product better than the O.U. In an ideal world we would perhaps see greater use of O.U. materials on campus, thereby releasing teaching staff for more face-to-face tuition where it is most needed.

The Open University has made a promising start. With around 50,000 students every year, it has shown that higher education can be conducted cheaply and effectively by multi-media distance teaching. However, although it has provided a successful route to a degree for a number of people with no educational qualifications and in manual occupations, progress towards greater openness has been slow. To a

great extent this seems to be due to certain features of the O.U. teaching system, some of which are inherent in its nature and others which could be altered. Unless the O.U. is to remain as an isolated token gesture towards equality of access, improvements must be made. This may require drastic changes in the O.U. system, as in the suggestion that it should become a central resource depot to service community-based educational schemes. On a more moderate level it might require the provision of lower level courses, either through an extension of the O.U. or by the creation of an Open College, with a higher proportion of face-to-face tuition. The O.U. has shown that the new media have a lot to offer. We must now learn how and where we can best put them to use.

FOOTNOTES

1. Trow M. "The pursuit of excellence in an egalitarian age". Plenary address at the 3rd International Conference on Higher Education, Lancaster University, September, 1975.

2. The social class categories are those defined by the Institute of Practitioners in Advertising.

3. For an extended discussion see McIntosh N. E. and Woodley A. "The Open University and second chance education". Paedagogica Europaea. IX/1974/2 pp 85-100

4. The characteristics of the 1971 intake are documented in "A degree of difference". McIntosh N. E. and Calder J. A report to the Social Science Research Council, July, 1975.

5. Carter C. F. "The economics of the Open University: a comment" Higher Education, Vol.2. No.1, February 1973, pp 69-70.

6. Wagner L. "The economics of the Open University". Higher Education. Vol. 1. No.2. May 1972, pp 159-183.

7. Laidlaw B. & Layard R. "Traditional versus Open University teaching methods: a cost comparison" Higher Education Vol. 3 1974 pp 439-468.

8. Birnbaum N. "A view from New England". In "The Open University Opens". Ed. Tunstall J. Routledge Kegan Paul, London, 1974.

9. See for instance. McIntosh N. E. and Morrison V. "Student demand progress and withdrawal: the Open University's first four years". Higher Education Review Vol. 7. No.1, Autumn 1974, pp 37-60.

10. See Calder J. and McIntosh N. "Appendix: Student drop-out, wastage and withdrawal". Higher Education Review Vol. 7. No.1, Autumn 1974 pp 61-68.

11. Mcintosh N. E. and Morrison Y. Op. cit.

12. For an extended theoretical discussion of this problem see Mcintosh N. E. "Open admission - an open door or a revolving door". Universities Quarterly, Vol. 29, No.2, Spring 1975.

APPENDIX

Table 11. The rate of continuation of O.U. students

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% graduating (cumulative)	1972	4.6			
	1973	21.5	2.0		
	1974	34.5	16.3	1.9	
	1975	42.4	26.9	16.3	1.8